



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

US EPA RECORDS CENTER REGION 5



1000879

REPLY TO THE ATTENTION OF:

MAY 03 1995

HRE-8J

Mr. Kevin K. Hersey  
CWM Chemical Services, Inc.  
3001 Butterfield Road  
Oakbrook, Illinois 60521

Re: Final CMS determination  
CWM Chemical Services Inc.  
ILD 000 672 121

Dear Mr. Hersey:

The United States Environmental Protection Agency (U.S. EPA) is in receipt of your March 27, 1995, letter concerning the facility at 11700 South Stony Island, Chicago, Illinois. This letter was in response to U.S. EPA's February 27, 1995 preliminary written determination that a Corrective Measures Study (CMS) is required at the CWM Chemical Services, Inc. (CWMCS) facility pursuant to Section IV, Part (H) of the 1988 Consent Judgement (CJ).

On March 6, 1995, U.S. EPA received CWMCS's Final RCRA Facility Investigation Report (RFI). U.S. EPA has completed reviews of the final RFI report and your response to the preliminary written determination for a CMS. As per a January 5, 1995, letter and attachment, U.S. EPA continues to hold its same position that CWMCS' final RFI report is deficient in several areas. The final RFI report was not revised as required by the CJ. U.S. EPA disagrees with a significant portion of the RFI report. Pursuant to section IV, Paragraph (I) of the CJ, U.S. EPA is required to make a final written determination as to whether a CMS is required at the CWMCS facility and provide a copy of this written determination to CWMCS. Based upon the information of record, U.S. EPA has determined that a CMS must be performed at the above-mentioned facility.

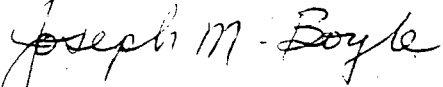
In your March 27, 1995, response, you have identified four issues you believe are relevant to a CMS determination. By this letter, and the enclosed attachment, U.S. EPA is providing the basis for making a determination that a CMS is necessary at the CMS facility pursuant to Section IV, Paragraph (I) of the CJ. U.S. EPA also hereby responds to the four issues in your March 27, 1995, letter that you have identified as relevant to the CMS determination. Finally, this constitutes U.S. EPA's final written determination that a CMS is necessary at the CWMCS facility located on 11700 South Stony Island, Chicago, Illinois.



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If you have any questions regarding this matter please contact Mr. Jonathan Adenuga of my staff at (312) 886-7954.

Sincerely yours,

A handwritten signature in cursive script that reads "Joseph M. Boyle". The signature is written in dark ink and is positioned above the typed name.

Joseph M. Boyle, Chief  
RCRA Enforcement Branch

cc: Kostas Dovantzis, PRC

## ATTACHMENT 1

### FINAL DETERMINATION REGARDING THE NEED FOR A CORRECTIVE MEASURES STUDY CHEMICAL WASTE MANAGEMENT - CHEMICAL SERVICES, INC. CHICAGO INCINERATOR FACILITY

#### SAND SEAMS ISSUE

CWMCS states that the information submitted to EPA indicates that sand seams in the upper and lower lacustrine layers are discontinuous and that the focus of the CMS will be on the unconsolidated unit overlying the upper lacustrine layer. Given the depth and frequency of contaminant occurrence, it may be appropriate to focus the CMS on the unconsolidated unit. As was indicated in U.S. EPA's January 5, 1994, letter, the issue regarding whether sand seams in the lower lacustrine layer are discontinuous should be deferred. It is also well documented in the Final RFI report that migration pathways to the lake exist, and that the upper lacustrine layer, the unconsolidated unit, and groundwater beneath the facility are contaminated with metals, volatile organic compounds (VOCs), and semi volatile organic compounds (SVOCs). In addition to the migration pathways and contaminants, adjacent lake sediments are also contaminated. As long as these contaminated media and all migration pathways to the Lake are addressed in the CMS, the issue of discontinuous sand seams in any of the geologic units beneath the CWMCS facility will become moot.

#### RISK ASSESSMENT ISSUE

In your response, you indicate that CWMCS submitted a Human Health Risk Assessment (HHRA) as an appendix to the RFI report and that in lieu of commenting on the HHRA report, U.S. EPA directed its consultant to prepare a supplemental HHRA (SHHRA). You further state that U.S. EPA demanded that the SHHRA information be incorporated without correction into the RFI report and that, to this date, U.S. EPA failed to identify the serious shortcoming, when in fact it has. CWMCS also states that it recommends that the SHHRA be withdrawn because U.S. EPA assumed in the SHHRA that commonly employed personal protective equipment (PPE) would not be employed at the facility.

Your description of the chronology of events regarding the risk assessment issue is inaccurate and unresponsive to the actual record of events, which includes your response to U.S. EPA's comments on CWMCS base line Risk Assessment (RA)). In U.S. EPA's March 1, 1991, letter to CWMCS, item 4 specifically requested that CWMCS conduct a full-fledged risk and environmental assessment that is consistent with Task III.D of the Scopes of Work, Attachment A of the C.J. The CWMCS RA report was submitted

to U.S.EPA on December 6, 1993. CWMCS also requested that this RA report be considered as draft because CWMCS has identified several inconsistencies in its own report and data.

Prior to the U.S. EPA's June 3, 1994, letter and comments on CWMCS RA report, and based on reviews of the hard-copy and digitized CWMCS's RA data, U.S. EPA identified two potential receptors (i.e. remediation onsite workers and subsistence fishermen) that were not evaluated in the CWMCS RA. U.S. EPA had previously notified CWMCS of these deficiencies during a December 29, 1993, telephone conversation. During that conversation, CWMCS indicated that these potential receptors were not necessary and should not be included in the RA. U.S. EPA disagreed with CWMCS's position on this issue. CWMCS was then informed that U.S. EPA will be evaluating the risk to these two potential receptors and the results would be incorporated in the RA.

Consistent with U.S. EPA's policy regarding conducting full-fledged risk assessments, U.S. EPA supplemented the CWMCS risk data in the RA report, after CWMCS declined to evaluate risks to the above-mentioned two potential receptors. U.S. EPA prepared an additional risk assessment to compensate for the deficient and incomplete RA. Based on the findings of the SHHRA, construction and utility workers are assumed to be exposed to a significant carcinogenic risk (in excess of  $10^4$ ) in the eastern fenced area of the facility that includes the former biobed area; and remediation workers can be assumed to employ PPE because their work must be performed in accordance with a health and safety plan (HSP). However, it is not commonly assumed that typical construction and utility workers wear PPE for routine underground construction or repair activities. Therefore, the SHHRA must remain an integral part of the HHRA and the final RFI report.

Finally, your August 19, 1994, response to U.S. EPA's June 3, 1994, comments on the CWMCS RA report clearly indicate that U.S. EPA prepare the SHHRA only after furnishing comments on the CWMCS HHRA. Attachment II of the August response refers to U.S. EPA's comments on these two potential receptors that were not evaluated in the CWMCS baseline HHRA.

#### **SURFACE WATER and SEDIMENT IMPACT ISSUE**

CWMCS states that very little contamination was found in surface water and that no significant risk may exist from exposure to sediment under the exposure scenarios considered in the SHHRA. CWMCS further states that surface water and sediment are outside of the scope of the CMS.

U.S. EPA has re-evaluated the CWMCS's Final RFI report and your response to the preliminary determination. We agree with the general concept of focusing the CMS on contaminated soils and groundwater within the pier. However, this idea does not preclude the need to remediate contaminated sediments, which likely resulted from hazardous waste management activities at the CWMCS facility. As was indicated in the table (Attachment II) of January 5, 1994, comment letter, Polycyclic Aromatic Hydrocarbons (PAHs) in sediments of sampling location S-1 identified in the Final RFI report (Table 4-36) exceed the benchmarks for individual and total PAHs as established in the "Guidance for Protection and Management of Aquatic Sediment Quality in Ontario" and "National Oceanic & Atmospheric Administration" and U.S. EPA Sediment Quality Criteria. Your explanation of the ubiquitous nature of PAHs are reasonable when applied to the entire Lake Calumet region. However, Contaminated sediments, in close proximity to the facility, most likely resulted from waste management areas within the facility. The CMS portion addressing surface water and sediments should focus on remediating only those contaminated sediments that have been identified during the RFI. In addition, the following items below support U.S. EPA's position that these sediments and the Lake waters must be protected from further degradation:

- Multitude of contaminants detected in the groundwater continues to discharge to the Lake based on the facility's hydrogeologic conditions;
- Two major dissolved groundwater plumes exist for various volatile organic compounds (VOCs). The dissolved VOC plumes such as benzene, 1,1-dichloroethene, phenol, 2,4-dichlorophenol and semi-VOC naphthalene slowly discharge to the lake and degrade the lake water quality long term and degrade the sediment quality short term;
- Though diluted in the lake water U.S. EPA's and CWMCS's flux calculations show that contaminants discharge to the lake, thus degrading lake water quality and;
- The integrity of the onsite vault liner as a barrier preventing migration of leachate from the vault to the lake or infiltration of groundwater into the vault is questionable.

#### VAULT, G-349 and OTHER AREAS

CWMCS states that the CMS should address the entire facility using a single or multiple options.

U.S. EPA agrees that a single or multiple remediation alternatives may be appropriate for the entire facility as long as all contaminated areas and media are adequately addressed.

Soil and groundwater contamination should be addressed for all solid waste management units investigated during the RFI, including but not limited to the vault, monitoring well G-349, former biobeds, and the Hyon tank farm area.

In summary, based on the results presented in the final RFI report, EPA's evaluation of that report, and the foregoing discussion, the scope of the CMS should address contaminated soils and groundwater in the unconsolidated unit overlying the upper lacustrine layer. As shown in Part 1, Sections 4.2 and 4.3, and Part 3 of the final RFI report, soil and groundwater contamination in this unit exceeds both background levels and applicable regulatory levels for protection of Class II groundwater in the State of Illinois. In addition, as shown in Part 1, Section 4.2, and as determined by EPA's evaluation of the final RFI data, groundwater in the unconsolidated unit is hydraulically connected to and discharges a multitude of contaminants to Lake Calumet. Therefore, soil and groundwater, including contaminated sediments, remediation should be addressed in the CMS for all relevant areas. Institutional controls restricting underground construction and utility work as discussed above should be an integral part of correction measures for the facility.

TM



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

MAR 30 1995

REPLY TO THE ATTENTION OF:

SP-14J

John Connolly  
General Manager  
CWM Chemical Services, Inc.  
11700 South Stony Island Avenue  
Chicago, Illinois 60617

Dear Mr. Connolly:

This letter concerns the disposal of soil excavated during the soil boring program and the closure activities conducted at CWM Chemical Services (CWM) during the summer and fall of 1994.

During separate telephone conversations in November and December 1994, yourself and Jim Doyle of CWM and Paul Ahern of Clean Harbors informed Tony Martig of my staff that drill cuttings and excavated soil from the boring program and closure activities was landfilled in a facility which did not have an EPA approval to landfill regulated PCB waste. You also informed Mr. Martig that samples of the soil were collected from four (4) points within the roll-off container which contained the soil and that the results showed 3.6, 8.56, 15.16, and 13.95 ppm PCBs, respectively.

The Federal PCB regulations at 40 CFR §761.125(c)(3)(v) requires soil in restricted access areas contaminated by PCB spills to be cleaned to 25 ppm PCBs. As a result, drill cuttings and soil excavated during the soil boring program and closure activities at CWM which contain less than 25 ppm PCBs do not have to be disposed of as a regulated PCB waste.

My September 21, 1994, letter to Mr. Ahern on the August 24, 1994, Decontamination/Closure Plan for CWM noted that soil found to contain 10 ppm PCBs or greater should be disposed of as PCB waste. This notation was based on the self imposed procedures for handling contaminated soil included in the Decontamination/Closure Plan and not on the regulations.

If you have any questions, please call Mr. Martig at (312) 353-2291.

Sincerely,

*John Connolly*  
John Connolly, Chief  
PCB Control Section

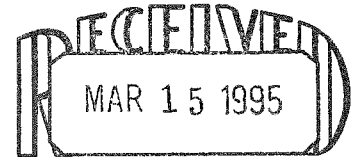


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ENVIRONMENTAL SERVICES, INC.

1200 CROWN COLONY DRIVE, P.O. BOX 9137 • QUINCY, MA 02269-9137  
(617) 849-1800



PCB CONTROL SECTION  
US EPA, REGION V

Via Fascimile

March 8, 1995

Mr. Mark Schollenberger, P.E.  
Illinois Environmental Protection Agency  
Division of Land Pollution Control -- #24  
Permit Section  
2200 Churchill Road  
Post Office Box 19276  
Springfield, IL 62794-9276

Re: Clean Harbors of Chicago, Inc.  
Log No. B-16-M-2  
Approved/Proposed Stabilization Activities

Dear Mr. Schollenberger:

In response to your request to James Laubsted, Clean Harbors of Chicago, Inc. (CHCI) is pleased to submit this letter and attachments to clarify CHCI's proposed stabilization activities at the CWM Chemcial Services site.

As will recall that during a September 16, 1993 teleconference between you and Douglas Clay for the IEPA, and James Laubsted and I for CHCI, the Agency denied CHCI's request to conduct stabilization activities in the existing CHCI loading dock due to the fact that the the dock was not a fully-enclosed structure. As a result, only the proposed Process Building No. 3 was subsequently approved for stabilization activities under the CHCI RCRA Part B permit.

However, during the September 16th meeting, the Agency agreed that CHCI would be allowed to add existing enclosed structures for stabilization activities as a Class 1 permit modification request. Under the Request for Permit Modification that is currently under review by the Agency, it is CHCI's intention to conduct stabilization activities in existing CWMCSI Building 25. We do not view this as a "new activity", but rather as a Class 1 modification request consistent with the September 16th meeting. For your information, I have included a copy of my follow-up letter to Mr. Clay which summarizes the key points of that meeting.





Mark Schollenberger, P.E./IEPA  
March 8, 1995  
Page 2

Per your request, attached please find revised text pages D-14 and D-15, and new text pages D-15A and D-16A which describe CHCI's current and proposed stabilization activities. These pages are marked with the revision date "03/08/95" and should be inserted into Section D-1(iv) of the Application.

If you have any questions, please feel free to contact me at (617) 849-1800, extension 4473.

Sincerely,

A handwritten signature in dark ink, reading "Paul A. Ahearn" with a long horizontal flourish extending to the right.

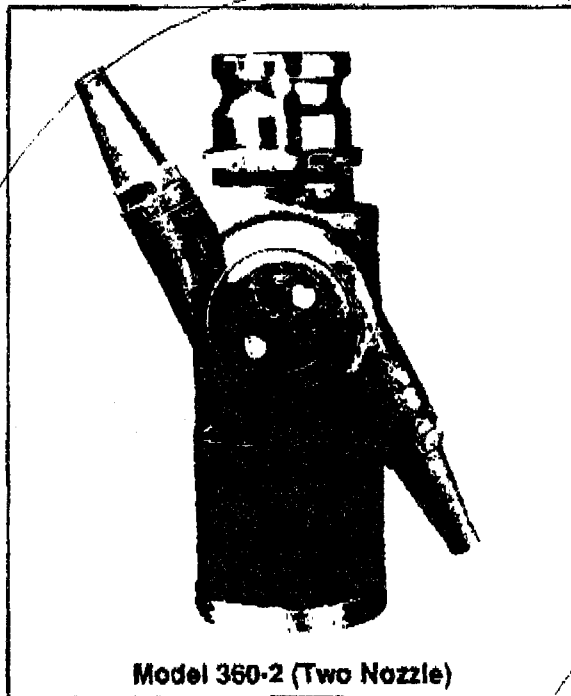
Paul A. Ahearn  
Manager, Regulatory Compliance

Enclosures

cc: Stephen Pozner, V.P., Compliance and Health & Safety, CHESI  
Anton Martig, USEPA (Letter Only)

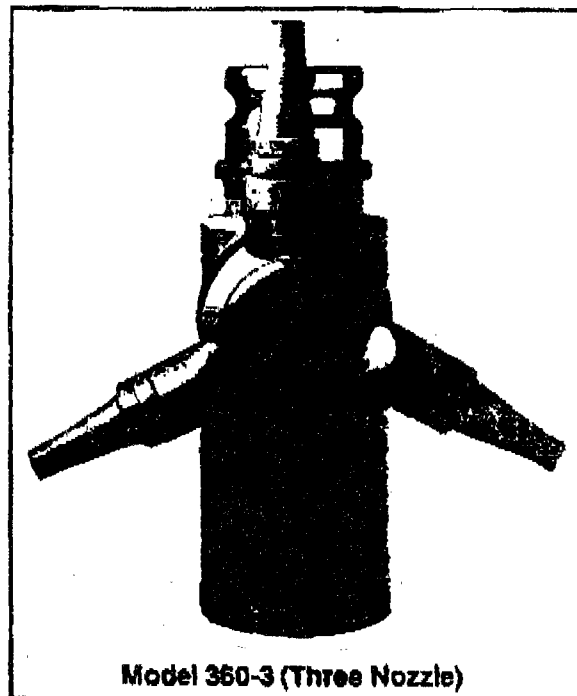


## MODEL 360



**Model 360-2 (Two Nozzle)**

The Sellers Model 360 Rotary Tank Cleaner combines all the features needed to handle the most serious tank cleaning problems. Gear ratio options, a variety of nozzle sizes and choice of 2- or 3-nozzle configurations provide maximum cleaning flexibility,



**Model 360-3 (Three Nozzle)**

predictable cleaning results and minimum cleaning cycle time. Stainless steel components, rugged construction and self-cleaning capability make the Model 360 ideal for both caustic and sanitary applications. Precision manufacturing ensures dependable performance and maintenance-free operation.

## Features & Specifications

### Flexibility

- 2- or 3-nozzle models for optimum cycle time
- Eight nozzle sizes for choice of impingement pressure
- Two interchangeable gear ratios: 655:1 (std.) or 273:1 (fast)
- Portable or CIP installation
- Connections: 2" NPT female, 2-1/2" NST male or 2-1/2" quick-disconnect
- Food grade oil lubricated, or Flo-thru non-lubricated options

### Performance

- Operating temperatures to 250°F (121°C)
- Operating pressures 40-350 psi (2.81-24.61 kg/cm<sup>2</sup>)
- Flows 30-300 gpm (1.89-18.92 liters/sec)
- Effective cleaning diameter to 75' (25 m)
- Head rotation speed: 1-12 rpm (360-2), 1-15 rpm (360-3)

### Construction

- Manufactured to meet caustic and sanitary requirements
- Internal washing passages eliminate deposit and bacterial buildup
- Drain holes provide full fluid and solution drainage
- Optional self-rinse external nozzle
- Dimensions: 12-1/4" (31.11 cm) high; 5-3/4" (14.60 cm) wide
- Weight: 25 lbs (360-2); 26 lbs (360-3)
- Minimum tank opening: 6-1/8" (15.24 cm) for 360-2; 9" (22.86 cm) for 360-3
- Materials of Construction -
  - Castings: 316-L Stainless Steel
  - Gears: 303 & 714 Stainless Steel
  - O-rings: Self-lubricating Neoprene or Viton\*
  - Seals: High-performance spring-energized Teflon\*
  - Gear shaft bearing system: Polyphenylene sulfide carbon-fiber reinforced
  - All other metallurgy: 316 Stainless Steel

\*Viton and Teflon are trademarks of E.I. DuPont de Nemours and Company.

# SELLERS 360

## ROTARY TANK CLEANING MACHINE

### EXPLODED VIEW & PARTS LIST

#### Use Recommendations:

Refer to the Exploded View's accompanying illustration numbers. Locate matching illustration number in the left hand column of the parts list. Use the line information given beneath the appropriate column heading for all ordering and reference purposes.



#### Portable vs. Clean-in-Place (C.I.P.) Machines

This is an exploded view of a portable tank cleaning machine. If you are ordering cast parts for a C.I.P. machine, pay special attention to the (\*) adjacent to the Illustration No. in the Castings section of the parts list. The (\*) indicates which parts are modified at the factory to allow for special self-rinsing C.I.P. capabilities. Refer to the C.I.P. component chart on the back page for specific part numbers for ordering or reference purposes.

#### Lubricated vs. Flow-thru Gearbox

The lubricated type of gearbox is sealed from the cleaning solution, and uses a food-grade oil for lubrication of the geartrain. The flow-thru type of gearbox uses the cleaning solution for lubrication of the geartrain, and can be identified by the 1/32" drain hole in the gearbox cover on the bottom of the machine. Many components are common to both types of gearboxes, while some are specific to the lubricated or flow-thru type machines. Be sure to choose the appropriate column heading when selecting a part number.

#### O-Ring Selection

The type of o-ring recommended for your application depends primarily upon the composition of the cleaning solution used. The chart below gives a general compatibility rating for the three types of stock o-rings available for the 36 tank cleaning machine. For more specific data, or special o-ring compound selection, contact your representative.

	Necprene	EPR	Viton
Water	B	A	B
Mild Caustic	B	A	B
Heavy Caustic	B	A	B
Mild Acid Solution	B	A	A
Chlorinated Solvents	C	C	A
Petroleum Oils	B	C	A

A = Best

B = Satisfactory

C = Not Recommended

**FOR ALL  
SPARE PARTS  
ORDERING &  
ASSEMBLY  
PURPOSES**

#### Gearbox Bearing Selection

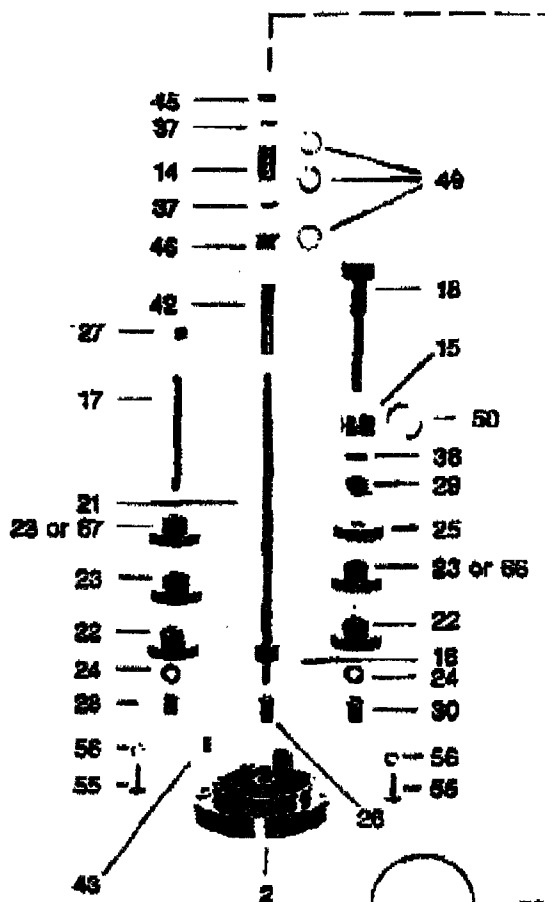
As a general rule, oil-lubricated gearboxes will use oil-impregnated bronze bearings, while flow-thru gearboxes will use either oil-impregnated bronze bearings or a PTFE type bearing material. Ask your representative for more specific information regarding bearing material selection for your clean application.

# SELLERS 360 EXPLODED VIEW & PARTS

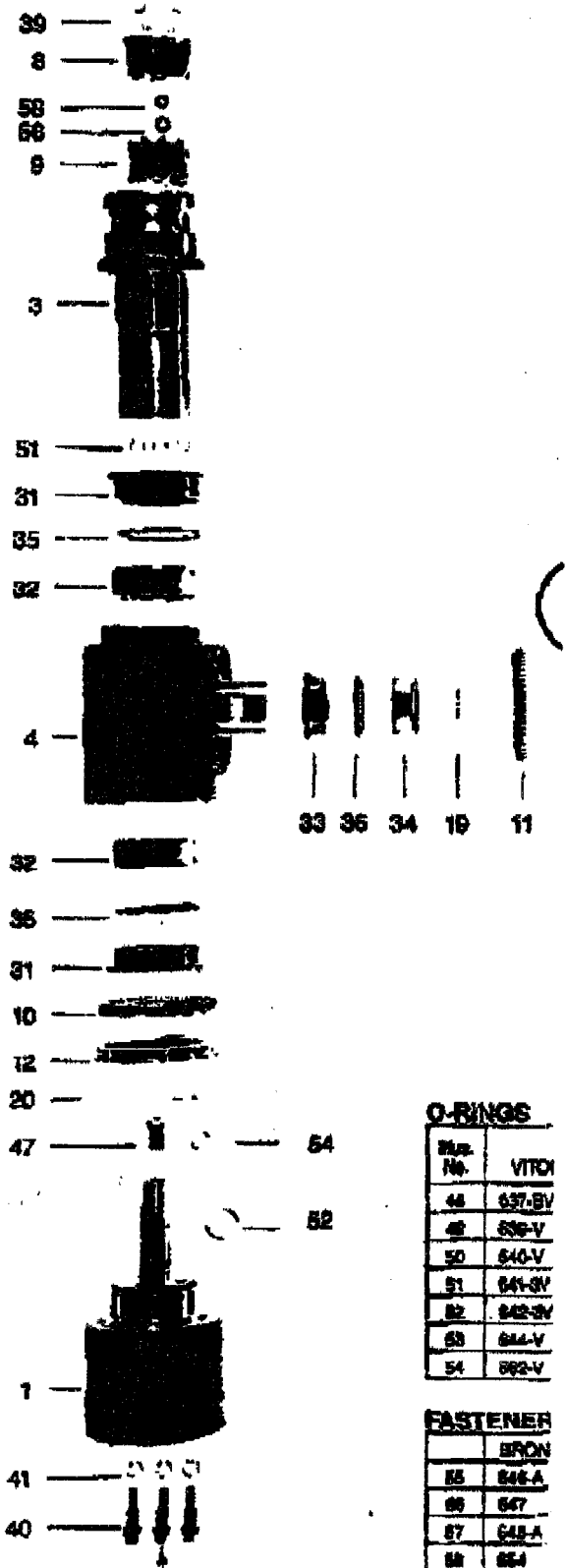
## Machine Configuration No.

#

No. of Nozzles (2/3): \_\_\_\_\_  
 Stainless/Bronze: \_\_\_\_\_  
 Gear Ratio (655/273): \_\_\_\_\_  
 Rotor Type: \_\_\_\_\_  
 Stator Type: \_\_\_\_\_  
 Nozzle Size: \_\_\_\_\_  
 Drive Type (Clutch/Pin/Both): \_\_\_\_\_  
 Self-Flush Nozzle (yes/no): \_\_\_\_\_  
 C.I.P./Portable: \_\_\_\_\_  
 Gearbox (Lube/Flo Thru): \_\_\_\_\_  
 O-Ring Type: \_\_\_\_\_  
 Bearing Type: \_\_\_\_\_



\* If C.I.P. use, see back page  
 ‡ Pin drive units only  
 N/A = Not Applicable  
 NI = Not Illustrated



### O-RINGS

Part No.	VITON
46	637-BV
48	638-V
50	640-V
51	641-BV
52	642-BV
53	644-V
54	662-V

### FASTENER

	BRON
55	648-A
56	647
57	648-A
58	654



**Vector Group, Inc.**

Environmental Contractors

PLEASE FAX TO 1-312-353-4342 DATE 2-2-95

RECEIVING LOCATION PLEASE DELIVER THE FOLLOWING PAGES TO:

Mr. Tony Martig

\_\_\_\_\_

SENT FROM M.C. Durfee

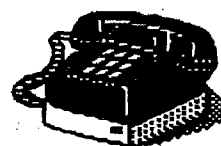
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U.S. Environmental Protection Agency  
Office of Pollution Prevention and Toxics

Washington, D.C. 20460



FACSIMILE

PLEASE PRINT IN BLACK INK ONLY

TO:

Tony Mantig

OFFICE PHONE:

312 383-4342

DATE:

1/27/95

ORGANIZATION:

EPA Reg V

FROM:

OPERATIONS BRANCH

(Mail Code 7404)

— Joan Blake	260-6236	— Tony Baney	260-3933
— Geraldine Hilton	260-3992	— Peggy Reynolds	260-3965
— Hiroshi Dodohara	260-3959	— John Smith	260-3964
— David Hannemann	260-3961	— Winston Lue	260-3962
— Tom Simons	260-3991	— Toni White	260-3933
— Peter Gimlin	260-3972		

Facsimile Number

(202) 260-1724

Verification Number

(202) 260-3933

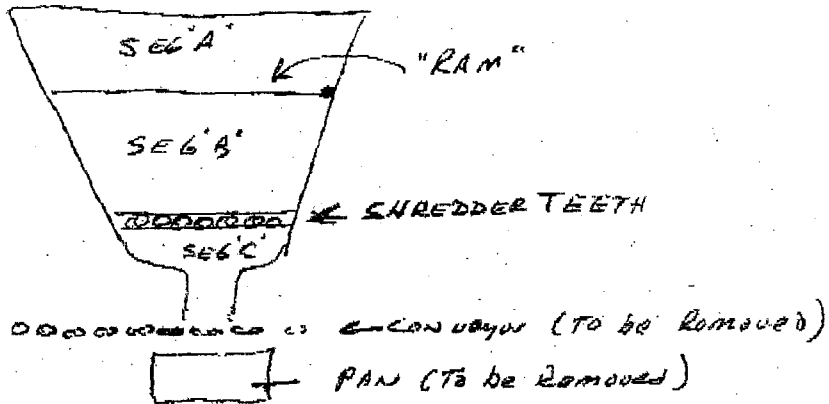
NOTES:

Enclosed ~~are~~ <sup>are</sup> diagrams of the shredders + crushers that Vector wants to decontaminate

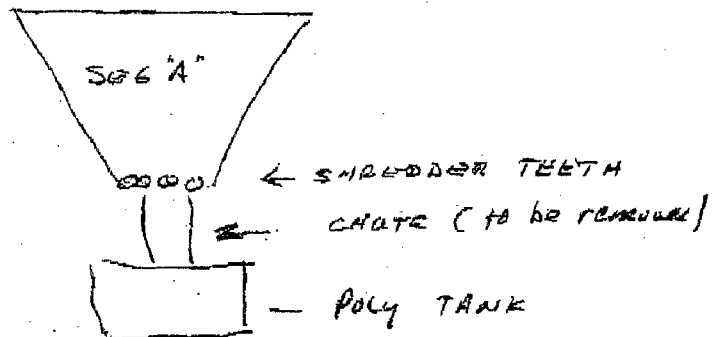
Please Number Each Page

## LARGE SHREDDER

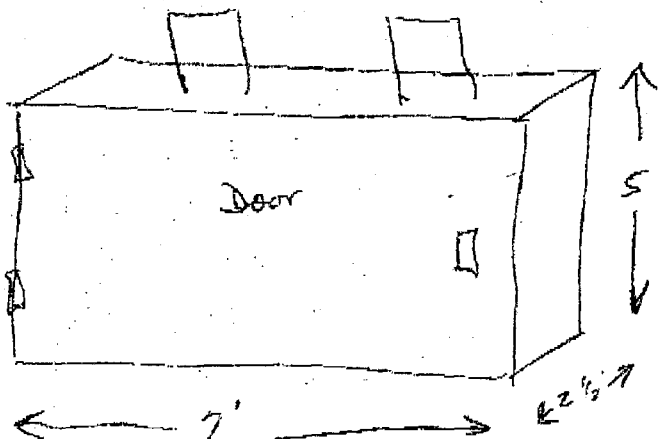
2



## SMALL SHREDDER



## DRUM CRASHER



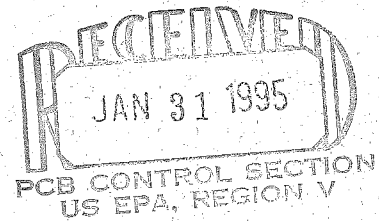
January 24, 1995

United States Environmental Protection Agency  
Region V  
77 West Jackson Boulevard  
Chicago, IL 60604-3507

Attn: Mr. Tony Martig

Re: Proposed Cleaning Procedure  
PCB-Contaminated Equipment  
CWM Facility  
Chicago, Illinois

  
**Vector Group, Inc.**  
Environmental Contractors



Gentlemen:

### **INTRODUCTION**

Vector Group, Inc. (Vector) has been retained by Clean Harbors to decontaminate and deregulate some PCB-contaminated equipment at the above referenced site. Vector has been requested to describe the procedure to be used for this activity. Where possible, Vector will follow the procedures outlined in Vector's Approval issued by the USEPA. Please let us know as soon as possible of any proposed modifications. Clean Harbors would like to begin this cleaning by February 1, 1995.

### **CLEANING PROCEDURE**

#### **LARGE SHREDDER**

The area around the tank under the large shredder will be bermed to provide containment for the area.

The large shredder can be divided into three segments as follows:

- ◆ Segment A, the upper portion of the hopper from the top of the hopper to the hydraulically operated "ram" that is used to force material in the hopper into the shredder blades.
- ◆ Segment B, the lower portion of the hopper, from the "ram" to the shredder teeth.
- ◆ Segment C, the lower portion of the shredder from the shredder teeth to the conveyor that removes material from the shredder and the "pan" below the conveyor that collects material and liquid that passes through the conveyor.



To clean each Segment, the Sellers nozzle will be placed inside the Segment and each opening of the Segment to the outside will be sealed to prevent leakage. Cleaning solution will be pumped from a storage tank through the Sellers nozzle and allowed to drain through the shredder into Segment C, the collection pan. The cleaning solution will be pumped from the collection pan back into the storage tank and recirculated.

Each Segment will be cleaned for four hours. While Segments B and C are being cleaned, the shredder teeth will be periodically rotated slightly so that all shredder teeth are cleaned. New cleaning solution will be used when judged appropriate by the Crew Chief. After each Segment is cleaned, the Sellers nozzle will be removed and placed in the next Segment. The cleaning order will be from the top to the bottom, that is Segment A will be cleaned first, Segment B, second and then Segment C, to minimize cross contamination. If the Sellers nozzle will not fit into any Segment, or the leakage of any Segment cannot be stopped, that Segment will be cleaned by steam cleaning.

After each Segment has been cleaned for four hours, one wipe sample will be taken from each Segment. Segment A will be sampled on the upper side of the "ram". Segment B will be sampled at the shredder teeth. Segment C will be sampled in the housing above the conveyor. Each wipe sample will be of a 100 cm<sup>2</sup> area. Each sample will be analyzed for PCB concentration. If any samples indicate a PCB concentration greater than 100 ug / 100 cm<sup>2</sup>, that Segment will be recleaned.

### SMALL SHREDDER

The area around the tank under the small shredder will be bermed to provide containment for the area.

The small shredder will be cleaned in one Segment. The Sellers nozzle will be placed in the hopper above the shredder teeth, and the top and sides of the hopper will be sealed. The cleaning solution will be pumped from a storage tank through the Sellers nozzle and allowed to drain through the shredder teeth into a containment tank below the Shredder. The cleaning solution will be pumped from the containment tank back into the storage tank and recirculated. Spraying will continue for four hours and one 100 cm<sup>2</sup> wipe sample will be taken from the shredder teeth. If the analyses of the wipe sample indicates a PCB concentration greater than 100 ug / 100 cm<sup>2</sup>, the cleaning will be repeated until the wipe sample indicates that the remediation objective has been reached. If the Sellers nozzle cannot be secured inside the hopper, or the hopper cannot be sealed, the small shredder will be cleaned by steam cleaning.



## DRUM CRUSHER

Since it is unlikely that the drum crusher can be adequately sealed to allow the use of the Sellers nozzle, the drum crusher will be placed inside of an open top poly tank and cleaned by steam cleaning. One 100 cm<sup>2</sup> wipe sample will be taken from the floor of the drum crusher, and cleaning will continue until the remediation objective has been reached.

Regards,



M. C. Durfee  
Program Manager

cc: Mr. Winston Lue  
Mr. Paul Ahern  
Mr. Alan Mount



January 6 , 1995

USEPA  
Region V  
77 West Jackson Boulevard  
Chicago, IL 60604-3507  
(312)353-4342 Fax

Attn: Mr. Tony Martig

Re: Thirty-Day Advance Notification of Approval for Vector Group, Inc. to Dispose  
of Polychlorinated Biphenyls

Gentlemen:

Vector Group, Inc. (Vector) has been retained by Clean Harbors to deregulate two shredder systems and one drum crusher at their Chicago facility. Under the terms of our nationwide permit to deregulate PCB contaminated systems issued by the United States Environmental Protection Agency, we are required to give Thirty day notification to appropriate local agencies of any such activity. Enclosed is our notification to the City of Chicago Department of Environmental.

The location of the site is:

Clean Harbors of Chicago, Inc  
11800 South Stony Island Ave  
Chicago, IL 60617

We understand that Clean Harbors would like to begin this activity on or about January 16 1995. If the proper agencies approve of this start date, we would be agreeable to commencing the deregulation at that time. We have also notified the USEPA office in Washington, DC, the EPA Region V office and all appropriate State and local agencies.

If you have any questions, or need further information, please let me know.

Regards,

Martin Heckard  
  
Project Manager

Thirty Day Advance Notification of Approval for <b>VECTOR GROUP, INC.</b> To Dispose of Polychlorinated Biphenyls					
<b>Client Information</b>			<b>Vector Information</b>		
Name: Clean Harbors of Chicago, Inc.			Name: Vector Group, Inc.		
Address: 11800 South Stony Island Ave			Address: 1118 Ferris Rd.		
City: Chicago	St: IL	Zip: 60617	City: Amelia	St: OH	Zip: 45102
Contact: James Laubsted			Contact: Mr. M. C. Durfee		
Phone: (312) 646-6202			Phone: (513) 752-8988		
Fax: (312) 646-6381			USEPA PCB Activity No. OH 0000184879		
<b>Site Location</b>			<b>Site Information</b>		
Name: Same as above			Type of PCB Disposal Activity: Cleaning of equipment.		
Address: Same as above					
City:	St:	Zip:	Amount and Type of PCB Material: Two Shredders and one crusher.		
Contact:			PCB Concentration Range: 0 to 10,000 ug/100 cm <sup>2</sup>		
Phone:					
Scheduled Time(s) and Date(s): 8:00 am - 6:00 pm January 23, 1995 through February 17, 1995					
<b>Agencies Notified</b>					
<b>USEPA</b>			<b>Regional EPA</b>		
Mr. Winston Lue USEPA 401 M Street S.W. (7404) Washington, DC 20460 (202) 260-3933			Mr. Tony Martig United States Environmental Protection Agency Region V 77 West Jackson Boulevard Chicago, IL 60604-3507 (312) 886-1334 or (312) 353-4342		
<b>State Agency</b>			<b>Local Agency</b>		
Mr. Robert Watson, P.E. Illinois EPA Div. of Land Pollution Control #24 Permit Section 2200 Churchill Rd. POB 19276 Springfield, IL 62794-9276 Ph. # (217) 524-3265			Henry Henderson City of Chicago Department of Environmental Central office Bldg. room 600A 320 N. Clark St. Chicago, IL 60610		

Post-it® Fax Note	7671	Date	1-5-95	# of pages	3
To	Tony Martig		From	J. Heckard	
Co./Dept.			Co.		
Phone #			Phone #		
Fax #			Fax #		



**Vector Group, Inc.**  
Environmental Contractors

**FAX:** Mr. Paul Ahern (Clean Harbors)  
Mr. Tony Martig (Region V)

**FROM:** John Heckard

**DATE:** January 5, 1995

**SUBJ:** Example of 30-day notification form

We have been requested to submit a proposal to Clean Harbors for the cleaning of two shredders and a drum crusher at the CWM facility in Chicago, and plan to undertake the work as soon as reasonably possible. Paul Ahern has requested that a sample of our 30-day notice be sent to the addressees. It is attached.

Our Approval requires that a 30-day notification be sent to:

- EPA - Washington
- The appropriate EPA Region
- The State Regulatory Agency
- The appropriate County

On one occasion, we have obtained a waiver from the 30-day period. It requires written approvals from the three enforcement agencies (Region, State and County). We have found that the waiver process can be shortened significantly if one of the regulatory agencies provides support.

We suggest that the 30-day notice be filed tomorrow, and plan to do that unless we are instructed otherwise.

**Vector Group, Inc.****Environmental Contractors**

November 3, 1994

United States Environmental Protection Agency  
Region IV  
345 Courtland Street, N.E.  
Atlanta, GA 30365

Attn: Mr. Stuart Perry

Re: Thirty Day Advance Notification of Approval for Vector Group, Inc.  
to Dispose of Polychlorinated Biphenyls  
Tenneco Gas  
MGT Station 2101, Portland, Tennessee

Gentlemen:

Vector Group, Inc. has been asked by Tenneco Gas to bid on the deregulation of the PCB contaminated compressed air system at the referenced natural gas compressor station. Deregulation activity is scheduled to begin on December 5, 1995, but the bid will not be awarded until after November 21, 1994. Tenneco has therefore requested that Vector submit the thirty-day notification so that, in the event that Vector is awarded the bid, Vector will be prepared to commence activity on the scheduled date.

Enclosed herewith, therefore, is the Thirty-Day Advance Notification for the referenced station. If Vector is awarded this contract, we will so notify you by our two-week notification for the week of November 28.

Copies of this notification are also being sent to the USEPA, and the appropriate State and local agencies. If you have any questions, please let me know.

Regards,

M. C. Durfee  
Project Manager

Enclosure

Thirty Day Advance Notification of Approval for <b>VECTOR GROUP, INC.</b> To Dispose of Polychlorinated Biphenyls					
<b>Client Information</b>			<b>Vector Information</b>		
Name: Tennessee Gas Pipeline			Name: Vector Group, Inc.		
Address: P.O. Box 2511			Address: 1118 Ferris Rd.		
City: Houston	St: TX	Zip: 77252-2511	City: Amelia	St: OH	Zip: 45102
Contact: William A. Thomas			Contact: Mr. M. C. Durfee		
Phone: (713) 757-4274			Phone: (513) 752-8988		
			USEPA PCB Activity No. OH 0000184879		
<b>Site Location</b>			<b>Site Information</b>		
Name: MGT Station 2101			Type of PCB Disposal Activity: Compressed Air System Decontamination.		
Address: P.O. Box H 220 TGT Road			Amount and Type of PCB Material: Air line piping, air receiver tanks and miscellaneous parts and appurtenances.		
City: Portland	St: TN	Zip: 37148	PCB Concentration Range: 0 to 100,000 ug/100 cm <sup>2</sup>		
Contact: Mr. Warren A Skinnemoen					
Phone: (615) 325-2001					
Scheduled Time(s) and Date(s): 8:00 am - 6:00 pm December 5, 1994 through December 16, 1994					
<b>Agencies Notified</b>					
<b>USEPA</b>			<b>Regional EPA</b>		
Mr. Winston Lue USEPA 401 M Street S.W. (7404) Washington, DC 20460 (202) 260-3933			Mr. Stuart Perry EPA Region IV 345 Courtland Street, N.E. Atlanta, GA 30365 (404) 347-1033		
<b>State Agency</b>			<b>Local Agency</b>		
Mr. William J. Forrester Division of Superfund Department of Environment & Conservation LNC Annex Fourth Floor 401 Church St. Nashville, TN 37243-1538 (615) 532-0913			See attached list:		



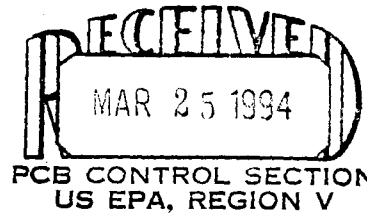
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

RECEIVED

MAR 23 1994

MAR 17 1994

U. S. EPA REGION 5  
OFFICE OF REGIONAL ADMINISTRATION



OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Mr. John M. Heckard  
Vice President  
Vector Group, Inc.  
7456 Jager Court  
Cincinnati, Ohio 45230

Dear Mr. Heckard:

Enclosed is a document entitled "Approval to Dispose of Polychlorinated Biphenyls (PCBs), Amended." The enclosed approval authorizes Vector Group, Inc. (Vector) to remove PCBs from natural gas pipeline pipe (up to 8 inches in diameter), appurtenances, and air receivers. The Office of Pollution Prevention and Toxic (OPPT) has reviewed results from the Vector's demonstration test report submitted on September 22, 1993.

The demonstration test for disposal of PCB contaminated water occurred from July 26-30, 1993. The results from the demonstration indicated that Vector can successfully clean natural gas pipeline pipe (8 inch or less diameter), appurtenances and air receiver tanks to levels of between 0.1 and 1 microgram per cm<sup>2</sup>.

EPA had audited and inspected the Vector operations during the demonstration and verified the efficacy of the Vector process. EPA certified chemical analysis of the on-site laboratory. During the July 26-30, 1993 demonstration, split wipe samples of the natural gas pipeline pipe and appurtenances were collected for analytical confirmation by Midwest Research Institute (MRI).

The approval is based upon the ability of the Vector Procedures to safely and effectively perform the above-mentioned disposal activities on facilities which had historically contained PCB condensate without such disposal activities resulting in environmental release of PCB containing condensate. In addition, the approval is based upon the Agency's conclusion that the PCB disposal activities as demonstrated to EPA and performed according to Vector Procedures do not present an unreasonable risk of injury to public health or the environment.

The Vector PCB removal approval to operate nationwide shall become effective upon signature of the Director of the Chemical Management Division of the Office of Pollution Prevention and Toxics (OPPT) and shall be effective until January 30, 1994. The approval may be withdrawn, or further conditions may be added.



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#### 4. Disposal/Reuse of Decontaminated Material

Air compressor systems and appurtances and metallic pipe which have been decontaminated according to the measurement based conditions described in Condition 6 below, and which have been wipe sampled according to Condition 6 and the wipe samples analyzed according to approved chemical analysis methodologies shall be placed into one of the disposal categories below based on the analytical results.

*→ Performance based*  
Air compressor systems and appurtances and metallic pipe which have been decontaminated according to the performance-based conditions described in Condition 5 shall be placed into one of the disposal categories below based on the completion of the performance-based procedures.

A. Disposal/Reuse of metallic pipe and appurtenances having PCB surface concentrations of equal to or greater than 1 ug/cm<sup>2</sup>.

Metallic pipe and appurtenances, removed from service and having surface concentrations greater than 1 ug/cm<sup>2</sup> as determined by EPA approved, statistically based wipe sampling are regulated for disposal. Regulated, removed PCB pipe and equipment shall be stored and disposed of according to 40 CFR 761.65 and 761.60.

B. Disposal of metallic pipe and appurtenances having PCB surface concentrations between 0.1 ug/cm<sup>2</sup> and less than 1 ug/cm<sup>2</sup>.

Metallic pipe and appurtenances which has been verified to meet the designated 1 ug/cm<sup>2</sup> cleanup level, but is above 0.1 ug/cm<sup>2</sup>, shall be unregulated for disposal, but authorized for reuse and distribution in commerce only in a natural gas pipeline system and/or a compressed air system or as described below:

- any transport of hydrocarbons, natural gas, chemical or petrochemical products.
- as a casing to provide secondary containment under highways, railroads, or other transportation systems
- industrial structural material such as fence posts, sign posts, gate posts, cross structures, and bridge supports.
- temporary flume pipe used during construction.
- Equipment skids.

- permanent culverts in non continuous flow situations not to exceed 80 feet in length.
- sewage service with written consent of POTW.
- steam service
- irrigation systems less than 200 miles in length where pipe is less than 20" in diameter.
- enclosed compressed air systems.

C. Disposal of metallic pipe and appurtenances having PCB surface concentrations of less than  $0.1 \text{ ug/cm}^2$ .

Metallic pipe and appurtenances having surface level concentrations below  $0.1 \text{ ug/cm}^2$  are not regulated for disposal or distribution in commerce and reuse except where those uses are associated with food, feed or drinking water.

Failure to clean any regulated metallic pipe, compressed air system, or its components to the  $1 \text{ ug/cm}^2$  level, or to the  $0.1 \text{ ug/cm}^2$  level in a measurement-based procedure, subjects the equipment to TSCA use, distribution in commerce, and disposal requirements based on the measured concentration of PCBs prior to decontamination. However, an EPA consent agreement/decreed may require/allow surface levels or residual PCB levels other than those authorized by this approval. The procedures for determining whether or not the VGMDU process has met the specific surface level requirements for a measurement-based procedure are described in Condition 6.

##### 5. Performance-Based Cleaning of Compressed Air Systems and Metallic Pipe

In Condition 3, the VGMDU is authorized to use its extraction solvent process to clean compressed air systems and metallic pipe and associated equipment. The VGMDU was demonstrated to clean the above mentioned equipment to levels of 10-100 microgram per 100 square centimeters under specific operations conditions shown below. The regulatory status of such equipment is described under Condition 4.

###### a. Air Receiver Tanks

The VGMDU process operated as below is approved to clean air receiver tanks. The performance of the VGMDU operated as below has cleaned surfaces to less than 100 micrograms per 100 square centimeters, which is the same as one microgram per square centimeter ( $1 \text{ ug/cm}^2$ ) but not less than 10 micrograms per 100 square centimeters ( $0.1 \text{ ug/cm}^2$ ).

6. Measurement-Based Cleaning of Metallic Pipe, Compressed Air Systems and Air Receiver Tanks

Vector is only authorized to clean piping 8 inches or less associated with air compressors, appurtenances and air receivers (maximum diameter of 40 feet) regardless of the length of the tank and metallic piping up to 36 inches associated with air compressors, line pipe and other industrial uses.

The surface measurements shall be taken by wipe or swab sampling and the sampling wipes/swabs chemically analyzed according to the procedures submitted in the permit application dated February 8, 1992 and the demonstration test plan dated April 6, 1992. Air compressors, appurtenances and pipe cleaned are regulated for use/disposal based on the surface area requirements in Condition 4. Recleaned areas must be surface sampled at locations different from earlier sample sites.

a. Appurtenances

Appurtenances, that is, miscellaneous valves, controllers, parts, fittings, other equipment associated with compressed air systems, metallic piping and disassembled air compressors contaminated by PCBs, may be cleaned either by spraying in a decontamination chamber as described in Condition 5. C. 1 or by soaking in a heated, agitated solution of Cimclean 30 as described in Condition 5. C. 2. The process for cleaning appurtenances by either method requires verification by a wipe sampling process. For the spraying process, the items to be cleaned are disassembled as necessary to expose all surfaces for cleaning, and placed in a decontamination chamber as described in the permit application which is on file at EPA Headquarters. The items are placed in such a way that their internal and external surface areas are exposed to a high-velocity spray through several spray nozzles.

Following placement of the items to be cleaned the chamber is then sealed to prevent volatile organic emissions. Any vapors are vented through a carbon absorption canister. For a period of at least one hour (60 minutes), a continuous high velocity recirculation flush shall be established by an external pump having the same capacity and flow rate as that documented in the permit application and demonstrated from May 1992.

At the end of the high velocity spray/soak cycle the chamber shall be opened and the parts removed, and a 100 cm<sup>2</sup> wipe samples will be taken on 10% of the parts cleaned, or a minimum of two samples which ever is greater.

For appurtenances cleaned by the soaking method, the items are immersed in a heated, agitated solution of 2% Cimclean 30. Following placement of the items to be cleaned, the chamber is then sealed to prevent volatile organic emissions. Any vapors are vented through a carbon absorption canister. Items to be cleaned remain in the heated, agitated solution for a minimum of 4 hours. At the end of the soak cycle, the chamber shall be opened and the parts removed and a 100 cm<sup>2</sup> wipe sample will be taken on a representative number of parts (see above).

The PCB surface concentrations shall be determined by chemical analysis of the wipes by Gas Chromatography (GC). The analytical procedures used are described in Vector applications on file at EPA Headquarters.

In the event Vector does not achieve PCB levels below 1 ug/cm<sup>2</sup>, Vector may repeat the process using any or all of the cleaning agent until the PCB concentration is below .1 ug/cm<sup>2</sup> when recleaned surface levels are remeasured as above. This is applicable to parts a, b and c of this Condition.

#### b. Metallic Piping

For measurement-based cleaning of metallic pipe up to 8 inches by flushing, a minimum process time equal to the times given in the performance based cleaning in Condition 4.b. will be used.

The surface concentration shall be measured according to appropriate wipe (for 4-inch interior diameter or larger pipe) or swab (for less than 4-inch interior diameter pipe) sampling procedures.

A surface sampling to verify measurement-based procedures used to clean pipe, if there is less than 100 square feet or 9.0 square meters of pipe surface to be cleaned, only one sample is required. For pipe systems of over 9.0 square meters, one sample is required for each 9.0 square meters and one for any remaining surface area left beyond 9.0 square meters area or multiples of 9.0 square meters. A sample shall be taken for every 9.0 square meter of inside diameter pipe surface.

For measurement-based cleaning of pipe up to 36 inches by the spraying process, a minimum cleaning time equal to the times given in the performance-based cleaning in Condition 5.b will be used. The surface concentration shall be measured according to an appropriate wipe sample on a 100 cm<sup>2</sup> area.

If pipes to be cleaned are cut into convenient lengths and are not buried, one sample for each length of pipe will be taken. If the pipe is not cut into convenient lengths and/or is buried, one sample will be taken for every 100 linear feet of pipe, regardless of the diameter of the pipe.

c. Air Receiver Tanks

For measurement-based cleaning of air receiver tanks a minimum process time equal to the times specified in the performance-based cleaning in Condition 4.a. will be used.

The surface concentration shall be measured according to approved sampling procedures. For surface sampling to verify measurement-based procedures to clean air receiver tanks, wipe samples will be taken from the interior surface of the air receiver tanks at the maximum throw distance. A spiked coupon shall be placed at the maximum throw distance and at the end of the test, the coupon shall be wipe sampled.

7. Feedstock Quality and Restrictions

Prior to decontamination, samples of cleaning agent from all parts of the VGMDU process shall be collected and analyzed using gas chromatography procedures specified in EPA-approved procedures outlined in the following documents:

"Guidelines for PCB Destruction Permit Applications and Demonstration Test Plans for PCB Disposal by Non-Thermal Alternative Methods," August 21, 1986;

"Recommended Analytical Requirements for PCB Data Generated On-Site During Non-Thermal PCB Destruction Tests," US EPA, March 19, 1986 (Draft);

"Quality Assurance and Quality Control Procedures for Demonstrating PCB Destruction in Filing for PCB Disposal Permit," US EPA, June 28, 1983 (Draft); and

"Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans," QAMS-005/80, Office of Research and Development, US EPA, December 29, 1980.